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EXAMINER

KENNEDY, JOSHUA T

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3679

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Please find below and/or attached an Office communication concerning this application or proceeding.



### **DETAILED ACTION**

Claims 1-20 have been examined.

#### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first material of the bearing portion and the second material of the connecting portion must be shown or the feature(s) canceled from the claim(s). As it stands currently, the crosshatching of each portion is the same (see Fig. 8). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

Claim 10 is objected to because of the following informalities: It is unclear as to what the value of the hardness is because "Shore A 90 hardness" is not a range as claimed, rather only one value. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Pena (US Patent 5,820,497).

disclose at least one rail section (10) having a plurality of vertical members (4) each having a lower end (9);

a plurality of horizontal members (13) connecting the vertical members;

a plurality of bearing feet (Figs 1 & 2) each having a connecting portion (5) and a bearing portion (6);

wherein each bearing foot is secured to the lower end of one of said plurality of vertical members (Claim 1, Lines 3-6);

wherein a first material forming the bearing portion having a first material hardness greater than a second material hardness of a second material forming the connecting portion (Col 3, Lines 33-39).

As to Claim 2. Pena discloses each bearing foot being molded of plastic (Col 3, Lines 33-39).

As to Claim 4. Pena discloses each of the plurality of vertical members as in the form of a tube (Col 2, Line 67).

As to Claim 5. Pena discloses each bearing foot having an axially extending passage formed therein which communicates an interior space of a tube with ambient space outside the tube so that any liquid that enters the tube flows out of the bottom of the tube through the passage in the bearing foot by gravity (Figs 1 & 2).

As to Claim 6. Pena discloses the connecting portion of the bearing foot extends into an open lower end of the tube (Figs 1 & 2) and resiliently engages an interior surface of the tube to secure the bearing foot thereto (Col 2, Lines 64-67; Col 3, Lines 1-11).

***Claim Rejections - 35 USC § 103***

Claims 1-4, 6, 8-14, 16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venegas Jr., et al (US 5,261,647) in view of Graham (US 6,520,461).

As to Claims 1, 2, 6, 9, 11, 12, 16, and 19. Venegas Jr. et al disclose a fall protection device for an opening in a roof, said device comprising:

- at least one rail section (10) having a plurality of vertical members (26a) each having a lower end (25a);
- a plurality of horizontal members (54) connecting the vertical members;

a plurality of bearing feet (18) each having a connecting portion (22) and a bearing portion (18);

wherein each bearing foot is secured to the lower end of one of said plurality of vertical members so that the bearing portion of the bearing feet support the vertical members above the roof (Figs 1 & 2).

However, Venegas Jr. et al do not disclose a first material forming the bearing portion having a first material hardness greater than a second material hardness of a second material forming the connecting portion, those materials being plastic and co-molded so that each bearing foot is of unitary construction; and a connecting portion of the bearing foot extending into an open lower end of the tube and resiliently engaging an interior surface of the tube to secure the bearing foot thereto.

Graham teaches a leg support having a plastic foot having "reinforcing ribs to deform and slidably receive a sleeve in friction fit manner" (Col 2, Lines 24-28). Because the ribs deform, it is inherent that the connection portion has a hardness less than that of the bearing portion since it is not an intrinsic material property and the fact that hardness can refer to resistance to bending, different thicknesses of one material result in a different hardness. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the metal stanchion portion of Venegas Jr. et al to be constructed of plastic and have the reinforcing rib portions of Graham because that would allow for the foot to be deformed and slidably received in the leg in a friction fit manner (it is noted that Applicant claims a first material and second material, but does not claim that the first material and second material are different materials, nor

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is it shown in the drawings that they are different materials; hence, it also being inherent that the ribs are comolded with the housing portion).

As to Claim 20. Venegas Jr. et al in view of Graham, as advanced above, disclose a fall protection device for an opening in a roof, said device comprising:

at least one rail section (Venegas Jr.10) having a vertical member (26);

wherein the vertical member is in the form of a metal tube having an open lower end (26; Claim 1, lines 27-30);

a bearing foot having a connecting portion (22) and a bearing portion (18);

wherein the bearing foot is secured to the lower end of the vertical member by the connecting portion so that the bearing portion supports the vertical member above the roof (Fig 1);

wherein the connecting portion of the bearing foot extends into the open lower end of the tube and resiliently engages an interior surface of the tube to secure the bearing foot thereto (Fig 2);

wherein a hardness of the bearing portion is greater than a hardness of the connecting portion (Col 2, Lines 24-28); and

wherein the connecting portion and the bearing portion are plastic (Graham; Col 1, Lines 31-33) and co-molded so that the bearing foot is of unitary construction (Venegas Jr.; 18 & 22).

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As to Claims 3 and 13. Venegas Jr. et al in view of Graham does not disclose the plastic as being polypropylene.

As a commercially available, inexpensive plastic, polypropylene is a well known material for use in this art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the plastic material used to be polypropylene because the selection of a known material based upon its suitability for the intended use has long been deemed to be a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

As to Claims 4 and 14. Venegas Jr. et al discloses each of the plurality of vertical members as in the form of a tube (Venegas Jr. et al, Fig 2).

As to Claims 8 and 18. Venegas Jr. et al in view of Graham disclose the bearing portion having an upper surface and a lower surface spaced from the upper surface, but does not disclose the thickness of the bearing portion being at least 0.25 inches.

It is not inventive to state the optimum values of a thickness of the bearing portion. Although silent on the dimension, the device of Venegas Jr. et al inherently has a thickness relative to the size of the leg support. Through routine experimentation and optimization, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the leg support of Venegas Jr. et al in view of Graham to have the thickness of the bearing portion being at least 0.25 inches producing no new and unexpected results.



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As to Claim 10. Venegas Jr. et al in view of Graham discloses both the second material hardness of the connection portion and the first material hardness of the bearing portion each fall within limits of Shore A 90 hardness.

It is not inventive to state the optimum values of a hardness of the connection and bearing portions. Although silent on the mechanical property value, the plastic used in this device inherently has a hardness value. Through routine experimentation and optimization, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the leg support of Graham to have a hardness of the connection and bearing portions to be Shore A 90 hardness.

Claims 7, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venegas Jr. in view of Graham as applied to claims 1, 2, 6, 9, 11, 12, 16, and 19 above, and further in view of Pena.

As to Claims 7, 15, and 17. Venegas Jr. et al in view of Graham as advanced above disclose the bearing portion being significantly as claimed, but do not disclose the bearing portion being annular-disc shaped having a circular outer periphery, an upper surface and a lower surface spaced from the upper surface, wherein inner and outer edges of the lower bearing surface being free of sharp corners, and each bearing foot having an axially extending passage formed therein which communicates an interior space of a tube with ambient space outside the tube so that any liquid that enters the

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tube flows out of the bottom of the tube through the passage in the bearing foot by gravity.

Pena discloses an anchor for a post having an annular-disc shaped bearing portion (6,7,8) having a circular outer periphery, an upper surface (6) and a lower surface (7) spaced from the upper surface wherein inner and outer edges of the lower bearing surface being free of sharp corners (since the bearing portions are circular, there are no corners, hence the surface is free of sharp corners), and each bearing foot having an axially extending passage (Figs 1 & 2) formed therein which communicates an interior space of a tube with ambient space outside the tube so that the connecting portion (5) can be secured to the surface (Col 3, Lines 5-11). It would have been obvious to one of ordinary skill in the art to modify the bearing portion as taught by Venegas Jr. et al in view of Graham to be of a disc shape and the bearing foot have an axially extending passage formed therein so that the connecting portion can releasably secure the post to the surface.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 4,600,179 to Willets cited to show a similar fence system with bearing feet insertable into a vertical member.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua T. Kennedy whose telephone number is (571) 272-8297. The examiner can normally be reached on M-F: 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTK  
1/17/2006



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